Brief: Ecological Connectivity in the Kunming-Montreal Global Biodiversity Framework

The 15th Conference of the Parties (CoP-15) to the Convention on Biological Diversity (CBD) adopted the Kunming-Montreal Global Biodiversity Framework¹ on 18 December 2022. This milestone agreement, along with its Global Monitoring Framework,² now serves as the strategic plan for implementation of the Convention for 2022-2030. The Kunming-Montreal Framework emphasizes the fundamental contribution that ecological connectivity makes to healthy functioning ecosystems and species, and its benefit to people, by including connectivity in a number of goals and targets to be advanced globally by the 193 signatory countries.

Key Goals and Targets for Connectivity

GOAL A: The integrity, connectivity and resilience of all ecosystems are maintained, enhanced, or restored, substantially increasing the area of natural ecosystems by 2050; Human induced extinction of known threatened species is halted, and, by 2050, extinction rate and risk of all species are reduced tenfold and the abundance of native wild species is increased to healthy and resilient levels; The genetic diversity within populations of wild and domesticated species, is maintained, safeguarding their adaptive potential.



TARGET 2: Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.

TARGET 3: Ensure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and of coastal and marine areas... are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures.

TARGET 12: Significantly increase the area and quality and connectivity of, access to, and benefits from green and blue spaces in urban and densely populated areas sustainably, by mainstreaming the conservation and sustainable use of biodiversity, and ensure biodiversity-inclusive urban planning, enhancing native biodiversity, ecological connectivity and integrity, and improving human health and well-being and connection to nature and contributing to inclusive and sustainable urbanization and the provision of ecosystem functions and services.

• Maintenance and restoration of connectivity of natural ecosystems

Key Indicators for Connectivity

Target 2:

Target 3:

• PARC-Connectedness

Goal A:

- CMS Connectivity Indicator
- Dendritic Connectivity Index
- Ecosystem Intactness Index
- Forest Fragmentation Index
- PARC-Connectedness
- Protected Connected (Protconn) Index
- Relative Magnitude of Fragmentation
- River Fragmentation Index
- Trends in mangrove forest fragmentation

1. https://www.cbd.int/doc/c/e6d3/cd1d/daf663719a03902a9b116c34/cop-15-l-25-en.pdf 2. https://www.cbd.int/doc/c/179e/aecb/592f67904bf07dca7d0971da/cop-15-l-26-en.pdf







Connectivity Indicator (in development)

Protected Areas Network Metric (ProNet)

Protected Area Isolation Index (PAI)